

TO : MEDFC
Attn: [REDACTED]
FROM : SCR PNH
SUBJECT : Monthly Report - June 1973

DATE : 7 July 1973
REF. No. : SCR/PNH73088

General

The KAF Maintenance Department managed to maintain fairly acceptable levels of Operation Ready (O/R) Rate in most Squadrons, even with all their controllable and uncontrollable problems present.

The T-28 Squadron was hard hit by a grounding TCTO regarding wing attach inspections for a aircraft and to further deplete the fleet an additional three (3) aircraft had to be sent to Thai-Am for Over "G" Inspections and repair of wrinkled skin sections.

The insufficient man-hours were further depleted by the rocket attach at other airfield which ultimately destroyed one AC-47 "Spookie" and damaged some 16 other aircraft, which will require many man-hours to repair both here and Thai-Am , as some are beyond the capability of KAF.

There is still present morale, motivation and discipline problem within the maintenance of KAF. There remains a definite need for more efficient supervisors who can utilize the present personnel properly, through proper assignment and control.

Aircraft Maintenance - General

Activity resume of C-47/AC-47, T-28, AU-24A, O-1D/A, U-1A and T-41 programs.

C-47/AC-47 Aircraft

Availability of AC-47 Aircraft was very good during the entire month of June. C-47 cargo aircraft availability was marginal due numerous problems. Lack of manpower seems to be the primary problems.

Two C-47 engines were changed prematurely, one due excessive metal in engine oil screen, (Believed to be silver from master rod bearing). The second engine was changed due scavenge oil pump failure in nose section of engine. This engine has been repaired locally by Engine Build-up (EBU) Shop and will be installed on C-47 cargo No. 43-15773.

Sheetmetal temporary repair on AC-47 45-1116 has been at a complete stoppage for last two(2) weeks due no manpower, this due to excessive workload at Battambang to repair the aircraft damaged by the rocket attack on 10 June 1973. It would be impossible to set a completion date because priorities are not established even though priority systems have been recommended.

As of the time of this writing there are only three (3) C-47 aircraft that do not have engines and propellers installed nor the modification to AF from -924e-90D engines. This situation has improved. AC-47 "Spookie" 45-1029 was destroyed by hostile action while parked at out-station airfield.

The bench stock location in the AC/C-47 Hangar is adjacent to the Armament Office and is now in the process of receiving a fresh coat of paint, shelves made up of dexion are 90% completed. A requisition for the necessary common hardware has been submitted to supply for action.

Maintenance Control was advised earlier in the month to monitor aircraft flights times more closely to avoid bunching up aircraft input for P.E. Inspections, four (4) aircraft were input for services at the same time, consequently this reflects on the operational/ready rate.

Two aircraft completed engine changes this month, the workload of all maintenance departments was consistent with the previous month.

UH-1H Helicopter

The helicopter program was fairly routine with two (2) exceptions. UH-1H No. 71-20277 was damaged while parked in the helicopter parking area. This incident was caused by the neglect of mechanics to install the cross tube skid assembly bolts prior to going to lunch. During lunch break another UH-1H helicopter hovered directly over 71-20277, rotor wash from hovering helicopter caused the skid gear to fold damaging belly of helicopter 71-20277. Estimate two (2) to three (3) weeks to repair locally. UH-1H 71-20152 was substantially damaged during hover take off while operating outstation. Actual cause of incident is not known at this time, however, understand tail rotor group and tail boom will have to be changed if aircraft is to be flown out of crash site area, understand security is also a problem at site.

Two (2) engines were changed during the month prematurely, one engine for excessive oil temperature and the other engine for power turbine blade rub, this engine can possibly be repaired locally.

Presently there are eight (8) UH-1H helicopters NORS "G" for drive shaft boots. Status on these boots was received a few days ago and the message indicated that replacement boots will not be available until January 1974. This figure is completely unrealistic when dealing in a combat situation. MEDTC has been advised of this situation and hopefully it can be resolved soon.

The XM 93 mini gun system installed in the helicopters has been giving some barrel problems. Investigation revealed that cleaning procedures are not being followed and improper lubricants are being used. This condition has been brought to the attention of all concerned and corrective action has been initiated.

Helicopter 68-16208 was shipped to Thai-Am for crash damage repair (CBD) on 26th of June 1973.

O-1A/1D Aircraft

The overall operation of this program was fairly routine during the month with no major problems or incidents. The shortage of O-470-11 and 15 engines could present problems in the near future. The local repair of the CBD aircraft is progressing as man/power permits, a requirement to fabricate a fuselage Jig and Wing Jig has been passed to Udon.

U-1A Aircraft

This program availability went down to nearly zero during the last part of the month. U-1A 55-3253 suffered a landing incident causing damage to belly of aircraft. U-1A 58-1709 had a hard landing causing minor damage to main landing gear and tail gear attachment area. Between these two incidents U-1A 55-3327 went into P.E. Inspection. The other U-1A aircraft 55-3295, 55-3327 and 59-2213 should not ever be carried on the aircraft status report due to their condition, do not believe is economically feasible to put these three (3) aircraft back into flyable condition unless there is a real requirement for this type aircraft.

AU-24A Aircraft

A) The training program in AU-24A (Helio Stallion) has gone exceptionally well, we experienced two (2) accidents this month in AU-24A program. One (1) accident involved aircraft 72-1323 at Battambang station, sustained a substantial damaged during a heavy rocket attack this month of June. The extent of damaged required an engine change and repair of fuselage section. Aircraft already ferried back to Pochontong Air Base and now in process of further inspection, aircraft will be released sometimes next week.

B) The other accident involved aircraft 72-1320 station in Battambang, tail gear broken during landing, the extent damaged will temporarily repair by the sheetmetal mechanics so that aircraft will ferry back to his station.

C) At present a total of nine (9) aircraft are operational in this station in Pochontong Air Base. There are three (3) aircraft have been previously grounded for waiting parts.

Requisitioning of NORS item on this three (3) aircraft have been forwarded to Supply, long lead times are anticipated on some critical items.

E) Completed shortly on construction of aircraft status board now being used which is not large enough to accommodate the present inventory of aircraft. The most outstanding objectives at the present time is the completion of AU-24A Office.

Training

<u>No of Students</u>	<u>Subject</u>	<u>Total Hours</u>	<u>Type of Trng</u>
30	Familiarization on the use of work procedure sheet on AU-24A Phase Inspection.	45	OJT

Problem Areas

A) AU-24A hangar has no available installation of electrical wiring and outlets for the used test equipment.

T-28B/D Aircraft

T-28B program was fairly routine during the month, availability was below average. Electrical and radio problems increased but part of this problem can be attributed to the rainy season.

T-28D availability probably reached and all time low. Primary cause was mandatory TCTO plus three (3) T-28D aircraft were grounded due excessive "G" loads indicated by wrinkled wing skin.

T-28D 54-137704 and 55-138248 were shipped to Thai-Am for crash damage repair. Three (3) aircraft were flown to Udorn to be used for flight training. Eight (8) T-28D aircraft were flown to Thai-Am for wing inspection and on 12th Phase Inspection.

Crash damage repair (CBD) is 95 percent complete on T-28D 51-7833, about all that remains is the installation of engine and propeller.

The upper engine cowling on T-28D 51-7831 ripped off in flight. Major damage was done to propeller when cowling came off. The propeller and cowling were replaced and aircraft returned to service. If safety pins were installed in shear pins as called out in the Technical order this type of incident would not happen. The importance of safety pins was once again discussed with all KAF personnel.

T-41 Aircraft

The T-41 fuselage jig is estimated to be completed in 30-45 days and will be shipped to Pochontong. After receipt of Jig work will commence on the three (3) T-41 damaged aircraft.

Problem Areas

Parking fuel trucks in and directly in front of hangars presents a potential hazard. This problem has been discussed with KAF personnel but so far no corrective action has been taken.

The T-28 hangar is unsatisfactory for two reasons. First it is too small, for example each time a gear retraction test is a possibility that the aircraft could fall off the jacks caused by prop wash and the high winds experienced during the rainy season. Second, each time it rains the hangar floor fills up with water creating a safety hazard. Need to discuss the possibility of making hangar No. 6 the T-28 hangar. The presidents C-47 could be moved to the present T-28 hangar with a little modification to the hangar.

Present locations of T-28 and AU-24A arming areas are considered hazard areas. Relocation of subject areas should be accomplished as soon as possible.

It has been noted that several aircraft programs are being affected by lack of test pilots or poor scheduling of available test pilots which ever the case may be. There were numerous periods during the month when maintenance had been completed and aircraft were released for test flight, however, some aircraft were not test flown until five (5) or six (6) days later. On paper this situation shows that the aircraft are still in maintenance which is not the case. Recommend some type of procedure be set up to reflect the true picture on this subject.

Serviceable engines and propellers are being received from Supply with the historical records missing. Considerable time and effort has been spent by the DMAT Team trying to find out "who" in KAF is taking these records, as of the time of this writing we have not found out who the "Phantom" is.

SHOPS

Maintenance Control Section

Several plans for the KAF Maintenance Control Section have been proposed and now pending official approval from KAF, however, the following were initiated:

1. Standardization of aircraft records to AFTO Form 781 series (Air Force).
 - a. Procedures were initiated with reference to T.O. 00-25-5 in form of a booklet explaining the usage of the subject form. Also attached to the booklet are blank AFTO Form 781 Series for sample.
 - b. At present date the T-28D, C-47/AC-47, AU-24A and a few T-28B aircraft records are in U.S. Air Force System, however, the KAF still use their own Khmer/French Log Books.
2. With the influx of aircraft to the KAF inventory and in turn increased maintenance requirements, the importance of initiating and following "Work Procedure Sheets" has been brought again to the KAF's attention. At present the KAF uses only one procedure sheet, the Phase/PE 100-Hour Inspection Work Procedure Sheet.

Various types of work procedure sheets applicable to KAF aircraft were ordered and received. Procedure sheets such as Pre-Flight, Overnight/Basic Postflight, Component Repair/Removal/Installation etc., was recommended to be implemented immediately however, at this time the KAF has not initiated the use of the procedure sheets

3. Aircraft Records. Complete review of the aircraft records is in progress. So Thai-Am has been initiated. If properly followed by all concerned, it will eliminate the problem of aircraft records being lost or misplaced. Procedures in aircraft acceptance has also been initiated and routed to all concerned.

The staffing of the Maintenance Control is quite adequate for the present work load. The problem however, is proper utilization, and discipline. The lower grade enlisted personnel are seen to be wandering around without direction or guidance, and are not highly motivated to their assigned job. A good portion of this is the result of poor or lax leadership on the part of the Supervisors.

Technical Training Control Section

During the month of June, only three (3) courses were conducted, namely: 9th Promotion, Brevet Supérieur, English Class I, and English Class II. The 9th Promotion B.S. class which was supposed to have been completed during the 2nd week of June was delayed for two weeks due to an alert order which prevented the students from attending classroom and OJT instructions. This course was finally completed 29 June. The English classes are making a slow progress. English class I is now in Book IV and English class II is in Book III.

Two instructors [REDACTED] were transferred to Pochontong effective 16 June to boost the number of instructors from 4 to 6. They are presently accomplishing lesson plans for new courses to be started on 1 July.

The Run-up test for T-28 aircraft was completed after a long delay which could not be avoided. All training charts were updated due to promotions and the addition of two instructors. All requisitions for much needed training materials and equipment on Form 1150 were renewed to make them current. Aside from this, a requisition for the procurement of commercial equipment which do not carry a Federal Stock Number was submitted to MEDTC. Up to the present, no information is available regarding the progress of this requisition.

Section II - Training Accomplished

<u>No of Students</u>	<u>Subject</u>	<u>Training Hours</u>	<u>Type of Trng</u>
16	English, Class I	546	Classroom
21	English, Class II	478	Classroom
62	9th Promotion, B.S.	7,385	Classroom & C

Section III - Problems

Training is still in dire need of more instructors. Two were added to the training staff recently but one instructor [REDACTED] the only instrument instructor at this station is slated for transfer to Battambang. I cannot figure out why Battambang needs him when they have already two or three instrument instructors there at present. Due to the 4-hour a day English classes, I don't have sufficient time to conduct an instructor's course nor will I be able to exercise full supervision on new instructors. The rest of my free time is utilized for making reports, schedules, editing of tests and lesson plans, etc.

Student attendance for the English classes is very poor, hence the progress is very slow. Very often, a lot of students are absent. When they report for class they ask a lot of questions pertaining to the past lessons. Every day, so much time is wasted and I'm sure that these classes can never be completed as per schedule.

Badly needed training materials and equipment are still unavailable. Training is encountering a lot of difficulties and this problem has greatly reduced the efficiency of this section.

Section IV - Plans

- a. To start new courses commencing on 1 July. These courses are:
Air Force Technical Order System, Instrument and Fuel Systems of C-47
A/C, Ignition System, T-28 A/C, Handtools, A/C Hardware, and Shop Mathematics.
- b. To start making run-up test for O-1D A/C.
- c. To continue making lesson plans for the 1974 courses.

Aircraft Ground Equipment (AGE)

This month AGE Shop has been through a heavy workload new Maintenance platforms, jacks and compressor were on pre-delivery inspection, assembly and testruns. Pending in Shop are two bomb lifts which is being worked on at present, differential and clutch overhaul jobs, waiting for parts are two forklifts one for engine assembly and one for cylinder head gasket.

Training

<u>No. of Students</u>	<u>Subject</u>	<u>Total Hours</u>	<u>Type of Trng</u>
5	Valve adjustment	10	Actual
5	Differential gear adjustments	10	Practical
5	Trouble Shooting	10	Actual & Oral
5	Electrical Harness	10	Actual & Oral
8	English	10	Conversation & Reading

Problems:

Non-availability of storage and working space is still a big problem due to the many equipment being received at AGE. Working space is much required as more space are taken for storage of new units, also canvas covers for protection is badly needed due to the incoming rainy season.

Plans:

Previously plans were discussed with my major to build a small toilet between the two (2) AGE Building. Also to request covers for equipment, and would like to discuss about the space between armament shop and hangar #5 for all equipment parking space.

Sheetmetal Section

1. Supervised repair and manufacture of five (5) more missing parts for T-28 gun package's for a total of nine (9) each required. Work completed 22 June and now ready for painting.
2. Supervised the inspection and repair of three (3) each C-47 engine firewall from EBU Shop. Work completed 26 June.

3. Supervised the damage repair, due to belly land at Poehentong Air Base of T-28 aircraft number #833. Work completed 28 June 1973.
4. Completed manufacture of nine (9) each oxygen air bottle brackets for T-28 aircraft gun package.
5. Supervised the repair of LH pilot door hinge attachment on aircraft UH-1H number 16443 and 15540.
6. Supervised the repair of bullet damage from bottom skin of LH wing leading edge of T-28 aircraft number 651.
7. Supervised the repair of bullet damage from bottom skin of LH wing trailing edge through fuel cell and external angle of T-28 aircraft number 741D. Work completed 16 June 1973.
8. Supervised the damage repair at RH bottom wing bomb rock attachment, due to collapse of RH main landing gear on aircraft number 656. Work completed 11 June.
9. Completed manufacture of seventy two (72) each exhaust deflector for T-28 aircraft.
10. Assisted the repair of shrapnel damage at Battambang Air Base on eleven (11) aircraft numbers.
1. C-47 43-48805.
2. AU-24A 72-1323.
3. T-28 51-7819, 138274, 51-153644 and 51-153645.
4. T-41 72-01433, 72-01429 and 70-02055.
5. -1A 316, 51-2387.

Training

<u>No. of Students</u>	<u>Subject</u>	<u>Total Hours</u>	<u>Type of Trng</u>
3	Reskinning	8	OJT
2	Splicing Skin Panel	4	OJT

Problems:

1. One (1) connec is needed for storage of flammable materials for paint shop.
2. Insufficient drill bits for Sheetmetal mechanics.
3. Inadequate hand tools for Sheetmetal mechanics.

Plans:

1. To complete installation of aircraft electrical wiring for American type grinding machine, panel shaker and drill press with different power requirements, such as 110 volts single phase, 220 volts sigle phase and 220 volts for 3 phase.

2. To resume the repair of UH-1H horizontal stab, which had been temporarily stopped, due to workload in the shop.
3. To make temporary repairs on AU-24A aircraft number 320 at Battambang Air Base.
4. To manufacture stands for PT-6-17 engines.

Airborne Radio Section

Experimental shifting of radio line mechanics to bench work and vice versa has proven effective in evaluating personnels interest and attitude toward both particular field. It at least enables the shop to cope the problem of limited mechanics against the increasing workload. There were six men from shop shifted to line and five from line shifted to shop.

Service record for the two months period ending 27 June 1973:

Input	-	368	Units
Output	-	279	Units
Repair support	-	2	each
Repairable balance forward	-	188	Units
For calibration	-	11	ea. (on schedule)

A C1904/ARC-27 test panel was completed. T-28B Gyro Compass System component test and fabrication was in progress.

Current insertions/revisions for shop technical publications were updated and additional T.O.'s were placed on order thru KAF Library. Higher failure than usual rate was noted on the radio compass systems. Assisted in trouble shooting subject in aircraft T-28B #716, 754, 664 and C-47 #6-254.

Training

Finally, we had the shop work training abroad for radio technicians. There were four(4) shop-men sent to Udorn for the purpose and three(3) for the C-123K program. The self-study course also goes on well.

Problems

None of the T.O.'s placed on order from almost one to six months has come, causing a slowdown. The O-1A and AU-24A and several test equipments are mostly affected.

Plan

An addition to the local fabrication project.

1. A portable battery operated power supply capable of field testing some aircraft system components and also providing ac and dc power output, for miscellaneous power hand tools. It will be placed on a cart for mobility in the flight line/ramp area.
2. Pilot's headset/mike and helmet test set.

Armament Section

(a) Advised OIC to remove all gun packages, Cal. 50 M3 guns, all bomb/rack for all aircraft "C" inspection schedule to go to Thai-Am for TCTO compliance and over.

- (b) To clean and lubricate all armament equipments removed from the aircraft prior to storage and properly tag with DD Form 1574 (Serviceable).
- (c) Corrected on the spot all discrepancies found, especially loading of ammunition, 500 lbs bombs fragmentation bomb, nose & tail fuzes with missing bolt stud of the bomb rack. Advise their mechanic to perform a "Post Flight Inspection" after the last flight of the day so the bombing system will be in operation for next mission.
- (d) Routine inspection was performed during loading of bombs. Advise mechanic to follow standard of 2 inches long protrusion on arming wire, nose & tail fuzes.
- (e) Research on Technical Order on special tools for repair and overhaul inspection of guns Cal. 50 on this base. Check follow up with Supply, of 10 items of special tools required, only four(4) items are N.I.S. Advise mechanic to fill up 1150 form for requisition. As soon as this four(4) items arrive the KAF can set up a repair program on this Base for their 50 Cal machine guns.
- (f) Instructed the mechanic to dis-assemble guns Cal. 50 in detail, inspect, clean, lubricate and proper packing was performed prior to shipment to Udorn for repair.
- (g) De-armed and download six bombs 500 lbs low drag of transit jet aircraft. Demonstration was performed for the procedures for downloading, de-arming.
- (h) Research on T.O. all fast consuming parts Cal. 50 guns for requisitions of 180 days bench stock level for armament shop.
- (i) Was determined that weapons mechanic are not using proper lubrication 7.62mm guns. Check with supply MIL-L-46000 proper lubrication of guns in accordance T.O. IWI-13-5-2 figure 1-3. N.I.S. at KAF Supply, advise mechanic to fill 1150 form for requisition.

Engine Build-UP (EBU)

Several areas of improvement was noted in the Engine Build-up Shop during the month of June. Most important was the introduction of the proper type work procedure sheets which were extracted from the applicable U.S.A.F Technical Manuals for all phases of engine build-up, to include preservation and special inspections on EBU related components. The Engine Build-up Shop, Technical Library was updated and proper binders provided. All T.O.'s that are required, but not available at present, were placed on order by special order.

The 1150 supply request forms have been reviewed and properly filed in separate locations, either on the specific engine or component worksheet clip boards or filed in appropriate special tool request file, or bench stock file.

The KAF Officer In Charge (OIC) of the Engine Build-up Shop is reviewing the possibility of dividing his personnel into three (3), five (5) or six (6) men maintenance crews to provide closer supervision and decrease wasted maintenance man hours.

The work load of the Engine Build-up Shop was increased during June, by the introduction of the first PT6A-27 Engine Build-up. This requirement presented several problems. Special tools and equipment were drawn from Supply and a special PT6A-27 engine stand is being built to expedite the build-up of this type engine. We hope in the future to provide the AU-24A Section with a complete engine package, ready for installation in the aircraft. This is to include PT6A-27 engine hot section inspections which will also be performed by EBU Personnel.

Supply

Activity continues at a steady pace for all areas of Supply. Some effort is noticed taking place to correct some problems outlined by Supply Advisor as well as MEDTC, however, progress will continue to be slow due to reasons reported numerous times previously.

Personnel Training

At a meeting with KAF Headquarters to discuss Supply problems outlined by both Supply Advisor and MEDTC, it was decided that lack of training was the source of most Supply problems. KAF agreed to intensify training by holding daily sessions with small groups, alternating in different areas of Supply. This effort has not gotten underway and it is very unlikely that it will. Reasons given by the Chief of Supply were that personnel could not be interrupted from their daily activities for additional training. Supervision of personnel is very weak and it is felt that little improvement or correction of long existing problems will take place unless a greater interest is taken by responsible OIC's.

Warehouse Stock Relocation Program:

The decision to utilize building board for shelving was preversed and finally KAF has purchased lumber for shelving. Cutting and placement of lumber is taking place, however, actual completion of stock relocation and inventory is estimated to be six months or more away. Relocation of AU-24A spares is still in progress and very slow. To further complicate the AU-24A spares problem AFLC has advised a new spares listing is in process reflecting 75-100 percent part number and FSN changes. Receipt of this listing will necessitate re-identification and re-warehousing within Federal Stock Classes.

Material Control/Stock Records Section:

Placement of stock replenishment requisition work sheets to the Requisition Section remains low with an average of only 12 per day during the past month. Screening of the C-123K ISSL for requisitioning is taking place which hampers progress in solving other problems in this area. An O-1A ISSL is on hand for screening and requisitioning for some 2,000 line items. Completion of C-123K requisitioning is necessary prior to processing this listing.

Requisition/Requirements Section:

Activity in this area is steadily increasing with C-123K requisitioning along with other activities. Although numerous status follow-ups are generated daily it is felt a greater output of requisitions is more important at this time and could be increased if productivity increased in the stock records section accordingly. Emphasis has been stressed many times on the importance of keeping replenishment requisitions at the highest level possible. It is anticipated that the NOBS will continue to increase if appropriate action is not taken immediately.

Shipping and Receiving:

Shipment of C-47 propellers to Udorn without proper tags and historical records prevented overhaul at that location. Only two had tags with aircraft tail numbers shown.

The contractor is seeking approval to have these and all other C-47 props overhauled in Taiwan which is possible to accomplish at that facility without historical records.

The Supply Advisor visited Udorn during the month to discuss repairable parts and mutual problems in their repair and return. The Manager of Supply in coordination with applicable repair shops has promised to provide a complete listing of all parts on hand in shops pending repair. This will enable KAF to reconcile their records accordingly.

Currently KAF Supply has very poor records on outstanding parts at Udorn.. Procedures for maintaining accurate records and to allow follow-ups have been provided. To date procedure has not been established and followed.

Summary:

If the KAF are to increase the aircraft availability and self-sufficiency a definite program must be initiated to generate discipline, motivation and morale among the personnel, without all of the above a self-sufficient organization cannot and will not exist of its own momentum.

The tools to accomplish the objective has been offered, they only have to be accepted and used.

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